

**AGROFORESTRY CONTRIBUTION TO SOCIO-ECONOMIC
DEVELOPMENT OF HOUSEHOLDS IN OKIGWE
AGRICULTURAL ZONE OF IMO STATE, SOUTH EASTERN
NIGERIA**

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ABSTRACT: The research study investigated the contributions of agroforestry in Imo State with the view of finding out its relevance to socio-economic development of the study area. The aim of the research is to demonstrate whether agro forestry makes an important contribution to the economic and social development of households of the study area. The specific objective among others is to document the major agro forestry practices and products in the study area. In undertaking this research, 450 copies of questionnaire were distributed among three local government areas in the zone, and 433 copies were retrieved representing 96.2% of the sample population. A randomized quota sampling technique was used to administer the questionnaire to the respondents. The result revealed that agro forestry is an economic activity in the study area but not a major one; agro forestry does not contribute significantly to poverty reduction in the area; and that it is practiced by more males than female and by more of the people of above 55 years of age, than any other age cohorts. It was also observed that there is little or no government intervention in agro forestry in Imo State. The study also concluded that agro forestry can be a source of boost to the economy of Imo State if there should be adequate investment and commitment by the government of the day and attitudinal change among individual farmers. The study also gave recommendation which range from education and research to policy reform.

Keywords: Agro forestry, Okigwe, Non Timber Forest Products (NTFPs), socio-economic

INTRODUCTION

Notwithstanding the enormous revenues from oil, some of the factors fuelling the continuous economic stagnation in Nigeria, particularly in Imo state centre on the neglect of renewable natural resources sector, such as agriculture and forestry. Nigeria ranks among the most enterprising nation in Africa and her potential as an exporter of agro- industrial product and manufactured goods draws major interest from international investors. At the pinnacle of her economic power last century, Nigeria was one of the most highly sought destinations for global multinationals in search of a potentially vibrant terrain for investment.

Nigeria accounts for 54% of West African population and 51% of its gross national product and oil generates about 80% of the government revenue and 10.6% of Gross Domestic Product (GDP) at factor cost (Merem, 2005). Apart from oil, agriculture is still the activity of majority of Nigerians, constituting 40% of GDP. While the current policy framework emphasizes the development of non oil sector, especially agriculture, Nigeria's agriculture faces a set of challenges common across sub Saharan Africa, such as limited capital, small

size land holding, declining soil fertility, deforestation and unsustainable land use practices (WTO, 2004).

Nigeria was once covered by widespread vegetation comprising humid tropical rainforest in the South and savannah in the North. A great percentage of these luxuriant forests in the south, including those of Imo state, have been cleared by pressures mounted by human activities. The areas cleared are used for the production of various agricultural products including crop and forestry products. Generally, the southern rainforest is a source of the country's timber resource, as well as oil palm produce used both internally and some surplus exported to other countries of the world. The forests of Imo State provide the above two commodities in addition to others which include African breadfruit (*Treculiaafricana*), local star apple (*chrysophylumalbidum*), ube (*dacryodesedulis*), para-rubber (*Heveabraziliensis*), some fruit crops like plantain, banana (*Musa species*), pineapple, cashew and various other non timber forest products (NTFPs) like *ukpa* (*Tetracapidumconophorum*), *utazi* (*Gongronemalatifolia*), *okazi* (*Gnetumaficana*), *uziza* (*Piper guineensis*) etc. All these products contribute in one way or the other to socio- economic development of the area. Currently, the tropical rain forest which is a source of these products that cover about two percent of the total land area of Nigeria is being depleted at an annual rate of 3.5 percent (FAO, 2001). The annual rate of change in total forest area from 1990 – 2000 stood at 4.0 million hectares (CIA, 2000; FAO, 2001; Mantu, 2001; UNEP, 2003). Agroforestry systems can be advantageous over conventional agriculture and forest production methods through increased productivity, economic benefits, social returns and ecological goods and services provided. Biodiversity in agroforestry systems is typically higher than in conventional agricultural systems.

Agriculture and forestry (agroforestry) sometimes leads to deforestation. Deforestation is a major threat to human life in terms of food security. Bisong (2007) in his study of deforestation and land use in South Eastern Nigeria stated that one plausible explanation of deforestation in public forest holding is the conversion of such government forest reserves into areas of government agricultural and tree crop plantation. He further stated that, this over the years has singularly accounted for high rate of deforestation in communities around forest reserves of *Ikom* and *Akamkpa* in Cross River state as well as *Ohaji* in Imo state. Apart from agriculture, other major causes of deforestation commonly reported in the literature include population growth, commercial logging, fuel wood gathering and demand for fodder and grazing (Li, 1991; Raven, 1991; Rowe, *et al*, 1992). But of these, agricultural expansion (both commercial/plantation and shifting/bush fallow cultivation) is evidently the leading source of forest loss in the tropics (Salau, 1993; NAS, 1982).

In Okigwe agricultural zone, one cannot say for sure whether the observed scenarios are applicable in the zone. If so, its extent or level of degradation does not seem to have been established. For instance the use of about seven hectares of fertile agricultural land in *Ogii* community in Okigwe local government area for industrial activities of concrete electric pole, block and concrete culvert production instead of using marginal lands is one of the problems that face agroforestry in the study area. The extent which people of the study area perceive agroforestry as integral part of traditional agricultural practice; the type of specific crops produced in different parts of the zone; whether there is any policy of agroforestry practices within the study area; what socio-economic gains do people of the study area derive from agroforestry; the relationship between agroforestry and other economic activities in the zone

and what other economic activities that are engaged by the people of Imo state are some of the issues/problem that are not clear in the study area.

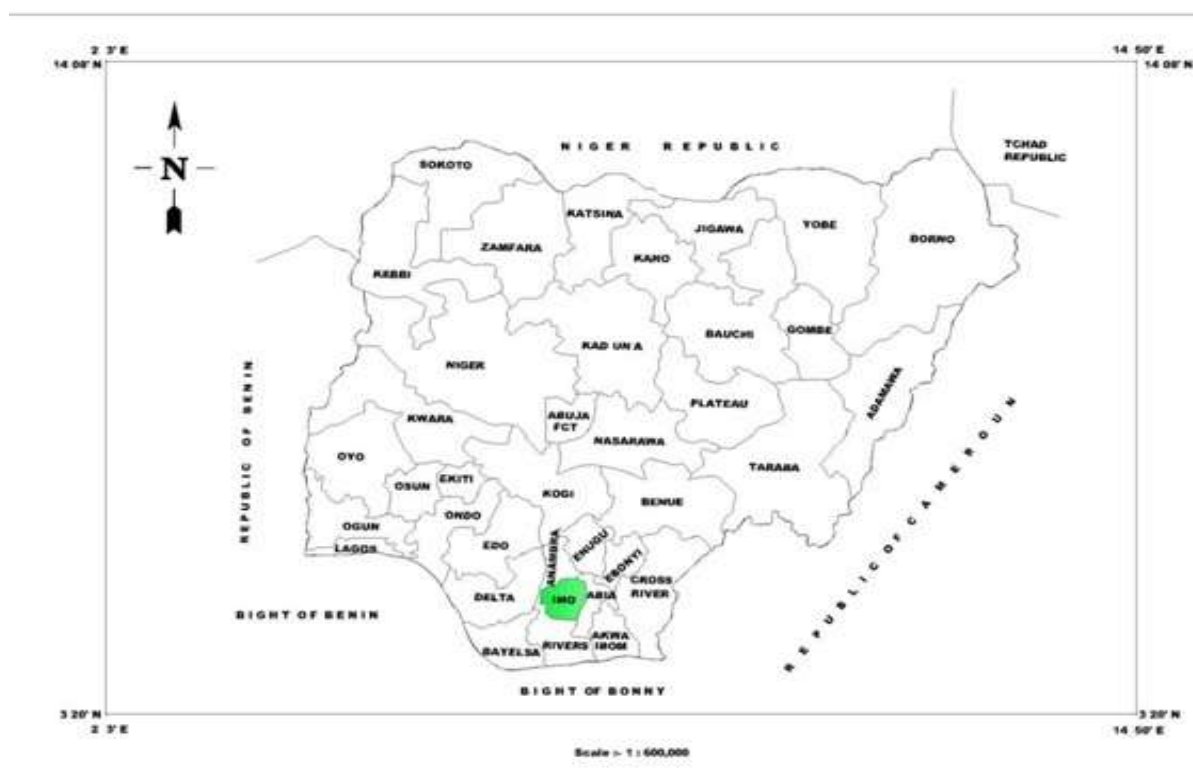
The overall aim of this research is to demonstrate whether agroforestry makes an important contribution to the economic and social development of households of the study area.

The specific objectives on the other hand are to:

- (i) Document the major agroforestry practices and products in the study area.
- (ii) Determine the relationship between agroforestry and sources of income of the study area.
- (iii) Evaluate the socio economic contributions of agroforestry to the socioeconomic development of the zone.
- (iv) Investigate relationship between agroforestry and employment of the study area.

The Study Area

The study area for this research is Imo state using Okigwe, IsialaMbano and Onuimo Local Government Areas. Imo state is one of the states in the south eastern part of Nigeria. It is located within the tropical rain forest zone of the country. It lies between latitudes $5^{\circ} 10' N - 6^{\circ} 00' N$ and longitude $6^{\circ} 40' E - 7^{\circ} 23' E$ of the Greenwich meridian. Its spatial extent according to federal office of statistics is about 5,530 square kilometres. It is bounded on the west and south by Rivers state, on the east by Abia, on the north by Anambra state (Figure 1.1). The study area lies on relatively higher terrain averaging 130 – 200 meters above sea level.



Source :- Ministry of Lands Survey and Urban Planning, Owerri.

Fig. 1.1 NIGERIA SHOWING IMO STATE

LITERATURE REVIEW

Agroforestry is an integrated approach of using the interactive benefits from combining trees and shrubs with crops and/or livestock in a farmland. It combines agricultural and forestry technologies to create more diverse, productive, profitable, healthy and sustainable land use systems.

Godsey (2000) defines agroforestry as a collective name for land use system and practices in which woody perennials are deliberately integrated with crops and/or animals on the same land management unit. The integration can either be spatial mixture or in temporal sequence. There are normally both ecological and economic interactions between woody and non woody components in agroforestry. In agroforestry systems, trees or shrubs are intentionally used within agricultural systems, or non timber forest products are cultured in forest settings. Knowledge, careful selection of species and good management of trees are needed to optimise the production of positive effect within systems to minimise negative competitive effects. The most common forms of agroforestry practice in Nigeria are taungya system, non timber tree farms and intercropping of leguminous trees with food crops (Federal Ministry of Environment, 2003).

Merem (2005) highlights that prior to the emergence of agroforestry, some ecological zones in Nigeria experienced considerable depletion of their forested areas over the years and this may be attributed to a host of factors associated with anthropogenic activities in the use of land in the country. The problem is evident considering the growing incidence of environmental degradation emanating from sectors of the economy such as agriculture and over dependence on oil revenues. He also notes that the rural nature of the country and their dependence on subsistence farming and ecological ramifications is quickening the gradual spread of agro forestry among Nigerian communities to arrest the problem.

Community based effort in three southern states *reveal* a mix of similarities and divergence in their methods, priorities and accomplishments. His observation was that farmers in Urhobo area of the Niger Delta practiced integrated farming that uses palm trees along side other crops to maintain soil fertility (Aweto, 2000). In Illesha, the Leventies Foundation through a joint venture provided a major boost to education when it backed up its commitment to sustainability by establishing Illesha agricultural school to educate farmers. One of the major accomplishments involves the design of agro forestry nursery that distinguishes medicinal fruits and wood trees (Slinger, 2001).

In Abia State, a large majority of households showed their awareness of positive impact that trees and agroforestry brings to their environment (Odurukwe, 2004). They were involved in community based efforts to improve soil fertility and reduce erosion as well as enhance food security and income earning. The analyses of agroforestry practices in southern states, offers decision makers the tool to identify the environmental and economic benefit as a road map in the design of viable indices that will guide managers in crafting the appropriate strategies for dealing with the problem (Zingping & Dawson 2004).

Farming activity in Niger Delta region involves both staple food and cash crop production. The major staple food crops include plantain, banana, cocoyam, yam, maize, cassava, vegetable and melon. The major cash crops on the other hand include, oil palm, oranges (*citrus spp.*), kola nut (*cola spp.*), plantain and banana (*musa spp.*), raffia palm (*raffia spp.*),

cocoa (*Theobromacocoa*), coconut (*coconucifera*), and swamp rice (Okpara 2004). He further went on to state that the major natural resources currently being exploited in Nigeria for supposedly meeting the demand for socioeconomic development with the exception of solid, liquid mineral, air and solar power includes agricultural resources of agricultural product such as root crops and cereals; forest products such as timber and non-timber forest products (NTFPs); fishery products and other sea foods; wildlife resources; water resources for agriculture; livestock and land for non-agricultural use (Okpara, 2001; Nwibe, 2007).

Oluwasola (1997) noted that the farmers have been aware of the fragile of the rich tropical soils have in response evolve several agricultural practices as a way to optimally manage the soil resources, improve soil productivity and greater return of their effort. The agricultural practices gave way to natural regeneration as farmers allow land to rest for several years. During the period of re-growth, soil nutrient are naturally recycled through the decay of plant litter and residue. However, with the increasing population in the area, the stress on these resources has degraded the soil water and forest.

Azuaga (2008) stated that the systems and practices of agroforestry in south eastern Benue state indicate that some of practices have been in use for a long while some are adaptations of various systems by farmers. Agroforestry according to him is seen as land use management system that offers solution to land and forest degradation problems. Little effort has been made by both government and non governmental agencies to introduce modern techniques as found in other parts of the world.

Research Methodology

The research applied a survey method. The outline under research methodology for this research identified scope of data required; methods of data generation; and methods of data analysis.

Nature and Scope of Data Required

Two types of data used in this study are primary data and secondary data. These data were sourced from the field and library and they will yield both quantitative and qualitative data. Methods employed for generation of primary data are

Questionnaire Administration:

In this research, well structured questionnaires were administered to four hundred and fifty (450) respondents which is a representative of the entire population of the three local government areas under study. One hundred and fifty (150) respondents were sampled from each of the three local government areas and three autonomous communities were selected from each of the three local government areas for questionnaire administration. The respondents selected are mostly those that are agro-based. A randomized quota sampling techniques was used to administer the questionnaire to the respondents. Here about 300 respondents representing 68% of the sample size were farmers whereas one hundred and fifty respondents (150) representing 23% were administered to other interest groups including traditional rulers, town union presidents and secretaries of various farmers cooperative unions, staff of the department and ministries of agriculture and forestry in different local

government area headquarters and state capital. The questionnaire contains thirty (24) test items (questions) which was used to extract information from the respondent.

Table 1: Questionnaire Distribution for the Study

L.G.A	Community	No Distributed	Percentage Distributed	No Retrieved	Percentage Retrieved
Okigwe	Ogii	50	11.1	50	11.5
	Isiokwe	50	11.1	49	11.3
	Umulolo	50	11.1	48	11.1
Onuimo	Umuna	50	11.1	46	10.6
	UmuduruEgbeguru	50	11.1	48	11.1
	Okwelle	50	11.1	47	10.6
IsialaMbano	Umunkwo	50	11.1	46	10.6
	Amaraku	50	11.1	49	11.3
	Ugiri	50	11.1	50	11.6
Total		450	100	433	96.2

Secondary Data

These are generally already in existence and data collected from various sources;

Basic Statistics: The information here was obtained from the Federal and State statistics and they include census population of the study area and sample census of agriculture.

Other secondary sources of data include textbooks, journals, magazines, newspapers, documents and records from relevant ministries in Imo state and departments in Okigwe, IsialaMbano, and Onuimo local government areas.

Presentation and Discussions of Research Findings

Involvement of Different Age Cohorts in Agroforestry in the Study Area

Table 2 shows the involvement of different age cohorts practising agroforestry in the study area which reveals loss of interest by the active population. The data reveals that only 5 respondents or 3.5 percent of the total number of respondents sampled are within the age bracket of 16-25 years as against 200 or 46.2 percents of above 50 years age cohorts.

Table 2: Involvement of Different Age Cohorts in Agroforestry in the Study Area

L.G.A	COMMUNITY	AGE COHORTS				
		16-25 yrs	26-35 yrs	36-45 yrs	46-55 yrs	> 55
Okigwe	Ogii	0	4	9	8	17
	Isiokwe	3	6	6	20	33
	Umulolo	2	3	4	10	25
Onuimo	Umuna	1	3	5	8	11
	UmuduruEgbeaguru	4	8	6	17	21
	Okwelle	2	2	3	5	8

Isiala Mbano	Umunkwo	1	6	8	17	30
	Amaraku		4	7	13	24
	Ugiri	2	15	12	20	31
Total		15	40	60	118	200
Percentage (%)		3.5	9.2	13.9	24.3	46.2

Information from the Table revealed that the occupation of agroforestry in the study area were handled mostly by the ageing men and women (46-55) (24.3%) and above 55 years (46.2%) representing a total of 318 (70.5%) of the sample population. It also shows that youths and other members of the active population prefer to engage in more lucrative ventures like manufacturing and service industries hence they abandon agro forestry activities. It was also gathered that the people prefer to engage themselves in the business of agro forestry when they have retired from manufacturing and other service industries and activities. This trend was responsible for food insecurity in the area as agricultural activities are abandoned only to the ageing members of the communities. The observation is also in consonance with the findings of Nwibe (2007) where he observes that oil palm production in Oru local government area were engaged by the ageing population of above 55 years of age.

Occupational Distribution of the Respondents

The occupational distribution of the respondents is seen in table 3. A critical overview of the table shows that large number of the respondent from the various communities are self employed representing about 83 percent of the entire population, while only 17 percent of the respondents are engaged in formal sector of civil service. Out of the 83 percent involved in self-employment, about 206 or 48 percent are involved in different kinds of farming practice while about 145 representing about 20 percents engage in other agroforestry activities like timber production and palm tree cutting. About 61 respondents representing about 12 percent of the population are involved in different kinds of trading while fishing is not a major economic activity in the area as the research reveals that only 1.6 percent is engaged in the activity. The result also agrees with the finding of Onyenechere (2009), which stated that petty trading and farming are among the major economic activities of the rural women of Imo State, each representing 39.7 and 29.1 percent respectively (Onyenechere, 2009)

Table 3 Occupational Distribution of the Area

L.G.A	Community	Occupation						Total
		Civil Service	Farming	Palm Tree Cutting	Timber Dealer	Trading	Fishing	
Okigwe	Ogii	6	26	4	10	4		50
	Isiokwe	8	23	3	8	2	5	49
	Umulolo	12	20	2	6	8		48
Onuimo	Umuna	7	18	5	4	10	2	46
	Umuduruegbeaguru	4	32	6	3	3		48
	Okwelle	10	21	1	4	11		47
Isiala Mbano	Umunkwo	6	26	6	5	3		46
	Amaraku	12	16		7	14		49
	Ugiri	10	24	7	3	6		50
Total		75	206	34	50	61	7	433
Percentage		17.3	47.6	7.9	11.5	14.1	1.6	

Farming and Agricultural Practices of the Respondents

The data in Table 4 shows that the major farming practices obtained in the area are mixed farming and mixed cropping representing 197 (45.5%) and 168 (38.8%) respectively. The two practices combined together represent about 85 percent of the farming practices of the respondents. Mono cropping is rarely practiced in the area as indicated by 14 respondents representing 3.2 percent of the sampled populations. Animal rearing takes 54 or 12.5 percent of the respondents and it is practiced in small scale with greater percentage reared for family consumption and little surplus for sale. The study also gathered that most of these animals are reared in an enclosed area with the exception of poultry animals which are allowed to fend for themselves in open space. The only exception to this is large poultry farms in the area where poultry animals are restricted in an enclosed surrounding. These poultry farms as observed in the study area are very few in number.

Table 4: Farming/Agricultural Practices of the Respondents

L.G.A	Community	Farming/Agricultural Practices				Total
		Mixed Farming	Mixed Cropping	Mono Cropping	Animal Rearing	
Okigwe	Ogii	24	20	—	6	50
	Isiokwe	21	18	2	8	49
	Umulolo	26	18	—	4	48
Onuimo	Umuna	20	16	3	7	46
	Umuduru Egbeaguru	21	17	4	6	48
	Okwelle	23	15	—	9	47
Isialambano	Umunkwo	18	23	—	5	46
	Amaraku	25	22	—	2	49
	Ugiri	19	19	5	7	50
Total		197	168	14	54	433
Percentage		45.5	38.8	3.2	12.5	

The research also observed that the major reasons for mixed farming and mixed cropping are to minimize cost whereby labour employed in these farming practices are far less than when the farms and crops are located on different farm plots. Another reason for the adoption of these practices is also as a result of inadequacy of available farms plots for agricultural practices.

A good example of mixed farming and mixed cropping observed in the study area is seen in plate one where pineapple orchard and plantain/banana plantations are seen growing together on a piece of land. The research questionnaire also revealed that more than 70 percent of the respondents practice their farming on private/personal lands whereas those that rent (tenancy arrangement) lands for farming practices are mainly visitors to each of the area.



Plate 1: Pineapple orchard and plantain/banana plantations, growing together on a piece of land

Examination of Forest Products in the Study Area

Analysis of data obtained from the study indicate that both timber products and Non Timber Forest Products (NTFPs) are produced in the study area

The data on Table 5 shows different timber tree indicated by the respondents. The data shows that the quantity and number of major economic trees like *Iroko*, *Mahogany* and *Obeche* has declined drastically as each of them represents 3.5, 1.2 and 0.0 percents respectively, totalling about 5 percent or 20 respondents from the sampled respondents. The data also showed that African oil bean and *gmelina* represents a larger quantity of timber trees as each of them respectively represents 52 and 19 percents of the responses totalling about 71 percent of economic trees in the study. It was observed that the quantity and number of these trees are on the decline as a result of absence of these other economic trees which are used in building of houses and construction of bridges. The tree being affected as a result of this trend is *gmelina*. The implication of this is that *gmelina* is cut down incessantly for these constructions, hence if the trend continues; the tree will become scarce like other tree species.

Table 5: Timber Trees in the Study Area

Timber Trees	Number of Respondents	Percentage Score of Each Tree
Iroko	15	3.5
African Oil Bean	225	52
Gmelina	80	18.5
Mahogany	5	1.2
Achi (Brachystegiaeurycoma)	25	5.8
None	83	19.2
Total	433	100

When asked about how they sell the timber trees in their farmland, the responses obtained are seen in Table 6. Information from the respondents in Table 4.5 shows that 338 respondents or 78 percent sold their trees alive from the farm to timber merchants. The economic trees sold alive include Iroko, *Achi* (*Brachystegiaeurycoma*) etc. 50 respondents representing 11.5 percents cut their trees into pieces and sold as fuel wood to bakers and other users. Most of the trees here include oil bean tree. 30 respondents or 6.9 percents convert their tree into charcoal and sold to coal dealers. The tree involved here is mainly oil bean tree. While 10 respondents or 2.3 percent processed theirs into timber before selling to timber dealers, only 5 respondents or 1.2 percents uses most of their tree products.

Table 6: How Timbers are Sold by Owners in the Study Area.

	Methods of Timber Tree Sale	No of Respondents	Percentage
1	Sold live to timber Merchants	338	78.1
2	Processed into timber and sold to Merchants	10	2.3
3	Cuts into pieces and sold as fuel wood	50	11.5
4	Converted into charcoal and sold to dealers	30	6.9
5	Personal use	5	1.2
	Total	433	100.0

Observation from the research also reveals that the current trend in timber processing in the study area is the conversions of trees into charcoal before selling to charcoal dealers. The tree observed to be mostly affected by this trend is oil bean tree. This is because of the quality of heat oil bean charcoal generates. Also, it was observed that coal from oil bean tree is more expensive than that from other trees. From the interview conducted, it was revealed that charcoal from oil bean tree sells for about ₦5200.00 per bag while that from other trees cost about ₦3800.00 per bag.

The implication of this recent trend is that in the near future oil bean tree will be a scarce tree in the study area. This is because most of the oil bean trees, both mature and young ones have turned to most sought trees in the study area. If this phenomenon continues, in near future, oil bean tree will go extinct like other trees only to be seen through drawings on pages of paper by future generations. Plate 2, shows a heap of oil bean tree cut into pieces to be converted into charcoal.



Plate 2: Heap of oil bean tree cut into pieces to be converted into charcoal



Plate 3: Bags of charcoal obtained from tree conversion

Socio-Economic Benefits/Contributions of Agroforestry

Apart from generation of income from NTFPs, socio economic contributions as observed from the study are highlighted in Table 7. Data on the table shows different socio economic contributions of agroforestry in the study area. Analysis of the data from the table shows that the major contribution of agroforestry in the study area is source of food as indicated by 98 respondents equalling 45.7 percent of the sample population. Next in ranking of the

contribution is source of employment which has 59 respondents or 13.6 percent of the entire sample population. This is followed by the use as medicinal purpose indicated by 48 respondents or 11.1 percent. Other contributions are reduction of soil erosion (10.6 percent), maintenance of soil fertility (10.2 percent) and source of income which has 38 respondents or 8.8 percent.

Table 7: Socio-Economic Benefits of Agroforestry

Socioeconomic Benefits	No. of Respondents	percentage
Source of food	198	45.7
Source of income	38	8.8
Medicinal purpose	48	11.1
Source of employment	59	13.6
Maintenance of soil fertility	44	10.2
Control of soil erosion	46	10.6
Total	433	100

Further investigation reveals that the major product of agroforestry used for medicinal purpose is non timber forest products and roots of some plants.

Non-Timber Forest Products in the Study Area

Different non timber forest products produced in some reasonable quantities are seen in Table 8. The responses of the respondents show that *Utazi* and scent leaf ranks highest as 146 respondents or 33.7 percent and 100 respondents or 23.1 percents respectively are involved in their production. Other NTFPs are *Ukazi* with 80 respondents or 18.5 percents whereas the least produced among these non timber forest products is *Ukpa* which takes 40 respondents or 9.2 percents.

Table 8: Non-Timber Forest Products in the Area

Local Names	Botanical Names	No. of Respondent	Percentage
<i>Utazi</i>	<i>Gonronemalatifolia</i>	146	33.7
<i>Ukazi</i>	<i>Gnetum Africana</i>	80	18.5
<i>Nchuanwu</i>	<i>OccimumGratissimum</i>	100	23.1
<i>Ukpa</i>	<i>Tetracarpidumconophorum</i>	40	9.2
<i>Uziza</i>	<i>Piper guineensis</i>	67	15.5
Total		433	100

Data Source: Author's Fieldwork, 2010

The research also gathers that these products are mainly produced by women as it was observed from the questionnaire that more than 95 percent of non timber forest products are produced by women. The research also showed that their major motives for production of these NTEPs are mainly for food and income generation.

The research also went further to investigate different kinds of diseases cured by these non timber forest products and the respondents responses are presented in Table 9

From the responses, it is seen that agroforestry products serves for medicinal purpose in the study area. Information from the table reveals that malaria ranked the highest sickness cured by agroforestry products. This is seen as represented by 351 respondents or 81.1 percent. The study observed that the people from these rural inhabitants prefer to treat malaria with traditional medicine from roots and herbs than with orthodox medicine. The part of the plants normally used to prepare these medicines is basically the leaf, roots, fruits and barks which they boil with water. It was also observed that they can drink the mixture or use it to bath. Others also mix the roots with hot drinks and take it early in the morning.

Different sickness cured by agroforestry products is shown in Table 9.

Table 9: Medical Value of Agroforestry

Diseases/Sickness	No. of Respondents	Percentage
Malaria	357	81.1
Dysentery	27	6.2
Cholera	23	5.3
Wounds	0	0
STDS	7	1.6
Vomiting	8	1.8
Correction of bad breast milk	17	3.9
TOTAL	433	100

Other sickness/disease cured by forestry products include dysentery (6.2 percent), cholera (5.3 percent): correction of bad breast milk (3.9 percent); cure for vomiting and sexuality transmitted diseases take 8 and 7 respondents or 1.8 or 1.6 percent respectively.

Summary Research Findings

In the course of undergoing this research, the following findings were noted:

- i. That agroforestry, though constituting part of the economic activity in the area is not a major economic activity in the area.
- ii. The production of non timber forest products (NTFPs) are basically undertaken by more women than men while men are more involved in timber production than women..
- iii. Agroforestry in the study area helps to control soil erosion.
- iv. A greater percentage of the people use family labour in their farmland. Under the labour division, women and children focussed their involvement in weeds management, soil fertility maintenance and watering of plants, while men help in production of multipurpose trees and shrubs.

5.0 Conclusion and Recommendations

This study has focused on identifying the contributions of agroforestry to the socio economic development of Imo State. Three local government areas namely: *Okigwe, Onuimo and Isiala Mbano* have been used as sample locations for this survey. It is generally known that in Nigeria, agriculture and related forestry (agroforestry) are the main sources of food, a major employer of labour (employing about 60 percent of the population) (FME, 2003). The sector

is equally a key source of industrial raw materials, as well as a foreign exchange earner. Although crude oil is now by far the most important source of national revenue, it is also well understood that agriculture still employs about 40 percent of the labour force in Nigeria and more investment in it (agriculture and forestry) has the potential to employ even a greater percentage, thus reducing the rate of unemployment in the country. This research work has made a careful critical overview of agro forestry in the socio economic development of the study area. A lot of findings were made from the research with the major ones highlighted in the text.

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